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# THE REA LINEMAN

RURAL ELECTRIFICATION ADMINISTRATION

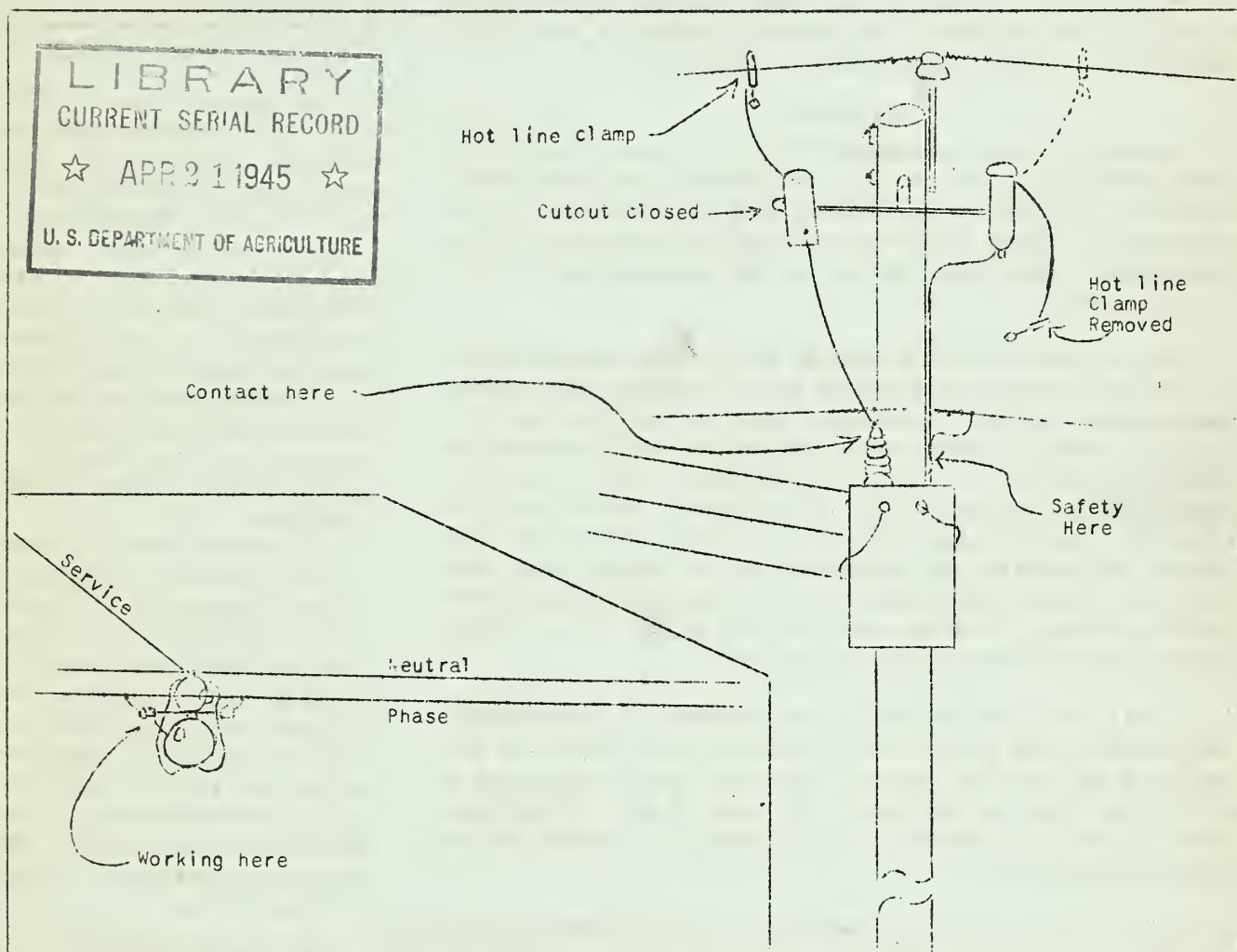
U. S. DEPARTMENT OF AGRICULTURE

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## WRISTS AND HANDS WERE BURNED



### REPORT:

One bright, clear afternoon after a snowstorm, a two-man crew parked their truck at the side of a highway to install glass bird guards on transformer primary terminals and high voltage tree wire from the lower terminal of the cutout to the primary bushing. 200 miles of line had been covered on this work. They parked slightly further on the road than customary, so that they could walk between the truck and a snow bank at the roadside.

One of the linemen attached his hot stick to his belt, climbed the pole, which was on high, well-drained ground, and belted off just below the transformer. With the stick, he disconnected the jumper leading to the lightning arrester. (The contractor, to obtain greater clearance for the riser wires, had installed an additional hot line

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for Employees of REA Systems

David A. Fleming, Editor

## WHEN IT HAPPENS TO YOU

Recently we received a co-op manager's report of a fatal accident occurring to an employee. One paragraph read something like this: "We have read of a good many of these occurrences but usually they were far removed from us — so much so that we never gave much thought to the possibility that one of these tragic occurrences might happen to one of our fellow workers. This fatality awakens our sense of responsibility for people working under our supervision."

Cooperation of co-op management, REA and all co-op employees is of utmost importance in the prevention of accidents. REA safety recommendations are based on actual accident experience records on all REA cooperatives. Strict enforcement of these recommendations, active participation in the safety meetings and instruction periods will have its good effect.

Many of us are inclined by habit to follow safety recommendations of a private utility by which we were formerly employed. These safety recommendations may be of the best, but they were usually set up for a crew of men working voltages considerably lower than our standard REA voltage of 7,200 volts to ground, supervised by a foreman with long years of experience and a proven safety record. This foreman was trained to watch every move made by his linemen on "hot" work. Men selected for operation and maintenance work on lines in rural areas and in small towns were linemen who had served several years under qualified foremen. Their own safety and that of their fellow workmen was ever present in the back of their minds.

Not all co-op employees have had the advantage of this experience and training. When called on for an opinion on the hazards of some particular job, it is not enough to just think back to how we used to do it. Some of us are here today by the grace of God. We must consider our present day problems from a viewpoint of our present day accident experience record.

We have heard a good many stories from veteran linemen working 2,300 on cedar poles with a small amount of protective equipment. These men quite often contacted a phase wire above their gloves around the elbows and shoulders. Occasionally they bumped their heads into the phase without any serious effects. They were merely "stung" or "jolted." Most of this work was performed on cedar poles. There was not much chance of being caught between phases or between phase and ground.

Our situation is entirely different. Our voltage is 7,200 to ground. Most of our poles are creosoted pine. Our neutral wire is ever present when we get too close to the phase. Should we make accidental contact, our chances of backing away and merely being "stung" or "jolted" are not very great.

GOOD WORK, MR. PATTERSON!

Our attention has been called to an incident that occurred near Lyons, Ga. The Altamaha Electric Membership Corporation's line crew happened along just after a highway wreck. Lineman J. M. Patterson stopped and rendered first aid to a woman suffering from a broken back. He stayed with the woman until the ambulance arrived. A deed well done and a credit to Mr. Patterson and his cooperative.

### LINEMAN AWARDED WATCH

The August issue of "The REA Lineman" carried a story of a pole-top resuscitation. At a recent annual meeting of the Kay Electric Cooperative, Blackwell, Okla., co-op lineman Joe Soucek was given a gold wrist watch in token of his resuscitation of a fellow lineman. The watch was presented by the company carrying the liability insurance for the cooperative. Our heartiest congratulations to Joe. He did a good job.

REA accident experience records indicate that injury results in four out of five cases of accidental contact. In two of these four cases the injury is of a high severity. In one of these four cases injuries are fatal. In approximately three-fourths of the accidents the burns are on the hands because rubber gloves were not worn.

Our work on REA lines can be done in a very safe manner. First, assume a position where it is impossible to make accidental contact with an energized part. Second, wear rubber gloves as insurance against the unexpected that may distract our attention or cause us to make the wrong move. Third, be sure that all de-energized lines are properly grounded before rubber gloves are removed.



# CHECK YOUR HOUSEKEEPING

Housekeeping around the warehouse and linemen's room is an important factor in safety. Check over this list of questions to see if your storage space and warehouse measure up. Answer yes or no:

## HOUSEKEEPING

Loose material under foot? \_\_\_\_\_

Overhead? \_\_\_\_\_

Material piled properly? \_\_\_\_\_

Any projecting objects or nails? \_\_\_\_\_

Any oil, water, or grease spilled? \_\_\_\_\_

Tool crib in good shape? \_\_\_\_\_

Waste and scrap around? \_\_\_\_\_

Tools in good shape? \_\_\_\_\_

Bulbs and reflectors clean? \_\_\_\_\_

Aisles and stairs marked? \_\_\_\_\_

## HANDLING MATERIALS

Is material handled by hand? \_\_\_\_\_

Hand Truck? \_\_\_\_\_

Is it being handled safely? \_\_\_\_\_

Mechanical aids available? \_\_\_\_\_

List them \_\_\_\_\_

## aisle space and work space

Are aisleways marked? \_\_\_\_\_

Enough space for material to be handled? \_\_\_\_\_

Are aisleways kept clear? \_\_\_\_\_

## HAND TOOLS

Are proper tools being used for each job? \_\_\_\_\_

Tools kept free from oil? \_\_\_\_\_

Are tools kept in proper condition? \_\_\_\_\_

Tool handles in good shape? \_\_\_\_\_

All mushrooms and burrs removed from heads of tools as they appear? \_\_\_\_\_

Tool handles loose? \_\_\_\_\_

Are tools kept sharp? \_\_\_\_\_

Does foreman check tools before he issues them? \_\_\_\_\_

Guards on sharp tools? \_\_\_\_\_

## LADDERS

Are rungs and side rails checked for safety? \_\_\_\_\_

Equipped with safety bases? \_\_\_\_\_

Preserved by spar varnish? \_\_\_\_\_

(Never paint a ladder—it will hide defects)

If you'd like, send in your checked sheet to the Editor, The Lineman, RE4, St. Louis 2, Mo. Your check marks will be kept confidential.

# WRISTS AND HANDS WERE BURNED

(Cont'd from page 1)

clamp instead of a "Y" jumper. The crew saw nothing unusual about this installation).

After disconnecting the jumper, the lineman unfastened his belt, went up the pole further and replaced his belt around the pole above the transformer and three-wire rack, but below the neutral conductor. Just then, the helper on the ground glanced at an oncoming truck, apparently wondering whether there was room enough for it to clear the parked truck. He heard no arc, but when he looked at the man on the pole again, the latter was hanging in his belt.

The helper had his hooks on, but not his belt. He put on the belt, climbed the pole, and started to administer resuscitation. As he climbed, he called to a nearby farmer to summon a doctor as quickly as possible.

After the helper had worked on the victim for about 10 minutes, a lineman and a helper from another crew arranged block and tackle while resuscitation was continued. The victim was then lowered to the ground. Prone pressure resuscitation was applied until the ambulance arrived about twenty-five minutes after the shock occurred. An undertaker declared the lineman dead, after examination.

From appearance of the burns on the victim's hands, he had placed his left wrist on the neutral conductor, reached over and touched the jumper leading from the cutout to the primary bushing. The burn on his left wrist was about an inch wide and three inches long, extending to the bone, and there was some indication of a flash burn. On the right hand, all four fingers were burned close to the palm and there was a deeper burn on the back of the hand.

## IT CAN HAPPEN TO YOU

Some time ago, a workman at one of the cooperatives broke his leg while unloading poles from a flat car. This man had proceeded in a safe manner and had used every safety precaution up to the time of the accident. Most of the poles had been unloaded and only a few were left on the car, from about the middle to the stakes on the back. He rolled one pole out about a foot, and another rolled down and crossed over the one rolled out. In attempting to straighten this pole, the man stepped between the poles just long enough for another pole to roll down and break his leg. This injury means several months of lost time besides nursing a broken leg and having to walk with crutches. This kind of accident may happen to you unless you use extreme caution. Let's be especially careful in unloading and handling poles.

--D.B. Fidle, Illinois Safety &  
Job Training Instructor--

## DISCUSSION:

This is a good report. Let's ask ourselves these questions -- most of us will probably have the answers:

1. Was the victim working in a routine manner?
2. Did the weather have anything to do with the occurrence?
3. Was the victim's attention distracted by the approach of another vehicle?
4. What do you think about carrying a hot stick up the pole on your belt?
5. Were transformer and "T" bracket installed according to specifications?
6. Was there a good chance to make a mistake on this location?
7. Should the cutout have been opened first?
8. Should the contractor have been allowed to make 2 hot line clamp taps?
9. Should the helper watch the lineman's moves on a pole?
10. Why did the victim climb this pole without rubber gloves on his hands?
11. Do you think he would have discovered his error before he was injured, if he had been wearing rubber gloves?
12. Would he have heard a "fuz" noise?
13. Does this occurrence justify the recommendation that rubber gloves be worn from the ground up?
14. Does this report indicate that deceased had formed the habit of working in a safe manner?
15. How long should artificial respiration be continued?
16. What am I doing to avoid a similar occurrence to myself?